and delayed as compared to the right. All the patients had syphilis Two had aortic insufficiency. In each the aorta was elongated, a little dilated and tortuous, but no trace of an aneurysm was demonstrable. This was confirmed at autopsy in one case. It is striking that the inequality was much less marked in one case after mercurial treatment.

Pulsus Alternans in Myocardial and Arterial Disease.—With a view to ascertaining the value of pulsus alterans as a sign of disease of the heart, its frequency in different conditions, and its prognostic significance, WINDLE (*Quart. Jour. Med.*, 1913, vi, 453) has analyzed 33 cases coming under his observation. In order of frequency it occured in the following conditions: (1) Arterial and myocardial disease; (2) chronic heart disease due to rheumatism; (3) pneumonia; (4) paroxysmal tachycardia; (5) acute rheumatic carditis. Ten cases were still under observation, but in more or less serious condition. Fourteen cases were fatal. Pulsus alternans was present in each patient when coming under observation. One case lived nearly two years. The rest died within a year. Nine other fatal cases developed pulsus alternans while under observation. The time of inception was known within a year; 2 lived eighteen months, and 2 twenty-four months. This supports Mackenzie's experience that the inception of pulsus alternans in aged people has invariably been followed by fatal heart failure within two or three years. In the 9 cases, last mentioned, there was no evidence of disease on clinical examination, except the pulsus alternans, to warrant a grave view being taken of the prognosis. When once present, pulsus alternans will never again be absent for long, because the exhaustion of the heart which it expresses is due to degeneration of the heart muscle. In the early stages alternation becomes latent for a time through bodily rest, or the action of drugs which slow the heart, but it eventually persists with rest and in spite of any measures of treatment yet tried.

Diagnosis of Typhoid Fever on Admission to a Hospital.—SHATTUCK and LAWRENCE (*Boston Med. and Surg. Jour.*, 1913, clxix, 228) believe typhoid fever should be suspected in patients entering a hospital after suffering from febrile conditions of a few days' duration. They should be treated under precautions to prevent the possible spread of infection. In a series of 100 non-typhoid patients of fourteen years of age or older, in which typhoid fever was suspected, bronchitis, bronchopneumonia, and influenza represent 29 per cent., or nearly one-third of the whole, undiagnosed fevers 15 per cent., gastro-enteritis, diarrhea and colitis, 12 per cent. They emphasize the importance of the differential diagnosis. The absence of rose spots at first examination has the same little weight for diagnosis as splenic enlargement not demonstrable by palpation and a negative Widal test. The absence of leukocytosis in a febrile disease strongly suggests typhoid fever. A count below 5000 is unusual in conditions simulating typhoid. A white count above 9000 is presumptive evidence against typhoid. Ordinary bronchitis, as a rule, entered the hospital during the first week, and typhoid with signs of bronchitis generally during the second week of illness. Congestion of the bases of the lungs, when present in febrile disease, uncomplicated by cardiac insufficiency, points to typhoid. The high temperature, seldom below 101°, and the low pulse rate are also helpful.

On Negative Pressure in the Marrow of the Long Bones of the Dog.—E. O. P. SCHULTZE and P. J. BEHAN (*Münch. med. Woch.*, 1913, lix, 2849) make a preliminary report on observations they have carried on, on pressure in the marrow of the long bones. They had expected to find a pressure corresponding about to that in the capillaries which Landois gives as 18 mm. Hg. To their surprise, they discovered a negative pressure which equaled 18 to 22 mm. of normal salt solution. Numerous experiments verified this finding. They believe a negative pressure is due to the suction of the veins, whose stomas are found in the marrow. To prove this the venous circulation was interrupted with a bandage, and the negative pressure disappeared.

The Occurrence of Ferments in the Cerebrospinal Fluid in Various Psychic Disorders.—SZABÓ (*Zeitschr. f. d. ges. Neurol. u. Psychiatr.*, 1913, xvii, 145) investigated the ferment action of the spinal fluid in 60 cases, of which 27 were general progressive paralysis, 5 epileptics and alcoholic psychoses, the remainder being cases of hysteria, senile dementia and manic-depressive insanity. Fluid, withdrawn before the noon-day meal, was not centrifuged. Occult blood was ruled out by the benzidin test. Diastase was determined by Wohlgemuth's method—invertase by the polarimeter, pepsin by the ruin and edestin tests. The presence of trypsin, lipase oxydase, lactose, and other ferments was tested for by customary methods. The results were similar to those of Kafka: normal fluid contains few, weakly acting enzymes; diastase occurs mainly in dementia præcox, alcoholic psychoses, senile dementia Lipase can be detected in normal liquor, but is especially potent in cases of general paresis. Szabó thinks the ferments arise from disintegrating cells and from the secretory activities of the choroid plexus.

On the Crescendo Murmur of Mitral Stenosis.—D. GERHARDT (*Münch. med. Woch.*, 1913, lix, 2713) reports observations on the crescendo murmur of mitral stenosis which militate against the view expressed by Brockbank in 1909 to the effect that this murmur is due to the passage of blood from ventricle to auricle. In other words, Gerhardt does not agree with Brockbank that the murmur is one of insufficiency of the mitral valves. Brockbank argues that the thickened stiff valves do not close as they normally do at the beginning of the ventricular contraction but only after the systole has reached a certain degree of intensity. The murmur produced by the flow of blood backward into the auricle increases in intensity with the increasing force of ventricular contraction ceasing with the first sound. In some cases of mitral stenosis, Gerhardt points out the presystolic murmur is separated from the first sound by a definite pause; in these cases the crescendo quality of the murmur is largely lacking and the snapping character of the first sound is not heard. In numerous cases of mitral stenosis with partial or complete block, one can often hear the gradual loss of the crescendo quality of the murmur, especially